BULLETIN
OF THE AMERICAN ART-UNION

NEW-YORK, AUGUST 1, 1851.

THE ILLUSTRATIONS.

The sketch in outline which accompanies the present number, is an etching on stone, executed by Mr. EHNINGER, representing *Old Diedrich Knickerbocker, telling stories to children.* Mr. Ehninger is known to many of our readers by his two series of designs, illustrating respectively Hood's *Bridge of Sighs*, and Irving's *Dolph Heyliger*, and also by a drawing of *Peter Stuyvesant and the Cobbler*, which accompanied a number of this Journal last year. He is an American Artist of promise, and has been for some time past a pupil of COUTURE, in Paris, where the present production was executed.

The principal woodcut which we give this month, is by BOBBETT and EDMONDS, from a painting by WENDEROTH, representing a scene at the Battle of Trenton, in which a British prisoner is brought before Washington, who is on horseback attended by his aids. This picture is to be included in the Distribution of the Art-Union in December next.

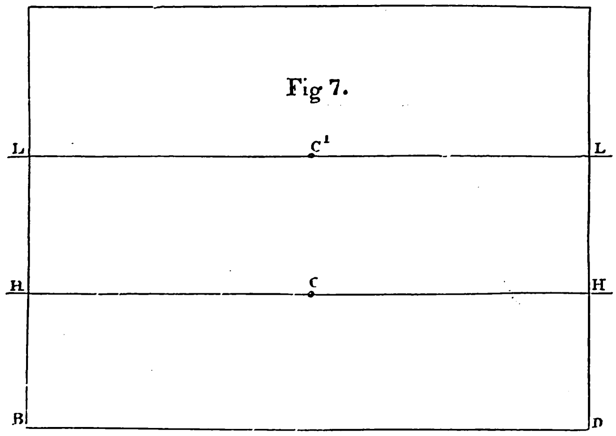
THE ART OF SKETCHING FROM NATURE.

(Continued from the last Number.)

OF THE UP-HILL VIEW.

All horizontal lines or planes going into the picture, whether ascending or descending, appear to vanish at the horizontal line. In painting, the sea and the sky are considered horizontal planes, and we have already instanced their apparent meeting in the horizontal line. So again, in representing the interior of a room—the floor and the ceiling (if flat) appear to approach each other, and would, if indefinitely produced, meet or vanish on the horizontal line of the spectator, as their common vanishing line.

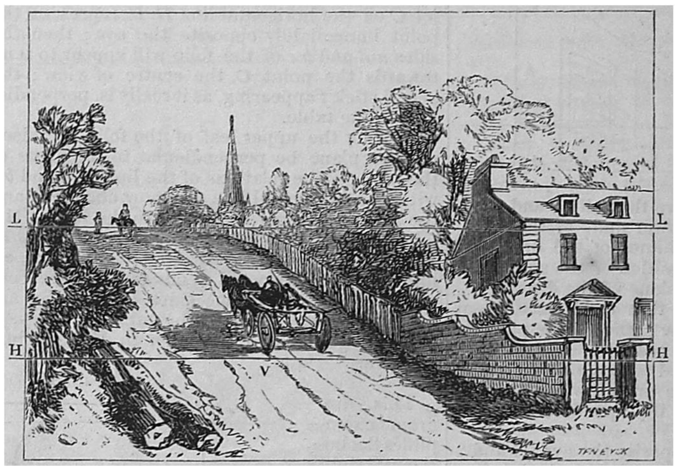
Now let the sketcher, referring to Fig. 1, suppose the ground before his position at *E*, to form an inclined plane instead of a horizontal one; a plane inclining upwards at some known or supposed angle. In this case, such an incline will meet the plane of the picture in a line above the horizontal line, and hence there will be two vanishing lines on his paper, one whereby to delineate objects on the horizontal surface; the other by which to draw those situated on the inclined plane. The following diagram will make this clear.



In this figure, *B D* is the base line; *H H* the horizontal or vanishing line; *C* the centre of that vanishing line; *L L* the vanishing line of the ascent; and *C*¹ the centre of that vanishing line.

It is obvious, that in proportion to the inclination of the plane, the line *L L* will be nearer to, or more distant from, the horizontal vanishing line. Towards some point or points in this line *L L*, the representations of all right lines parallel to the surface of the ascent must be drawn; as for instance—the felled trees, the ruts in the road, the upper and lower lines of the wooden palings, &c.

FIG. 8.



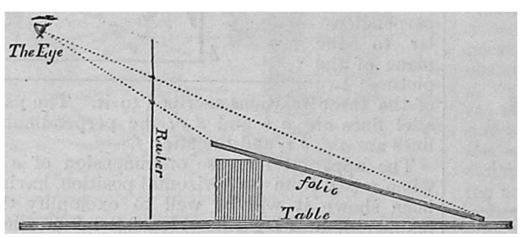
But the lines of the brick wall, and the horizontal lines of the house, which are horizontal and perpendicular to the plane of the picture, are drawn towards the horizontal line *H H*.

OF THE DOWN-HILL VIEW.

If a descending plane be visible to the eye of the spectator, it is clear that it can be represented upon paper; and the ultimate *depths* of the view will have in that representation a higher place on the picture than the *highest* sites of the actual view; this is shown in the following diagram.

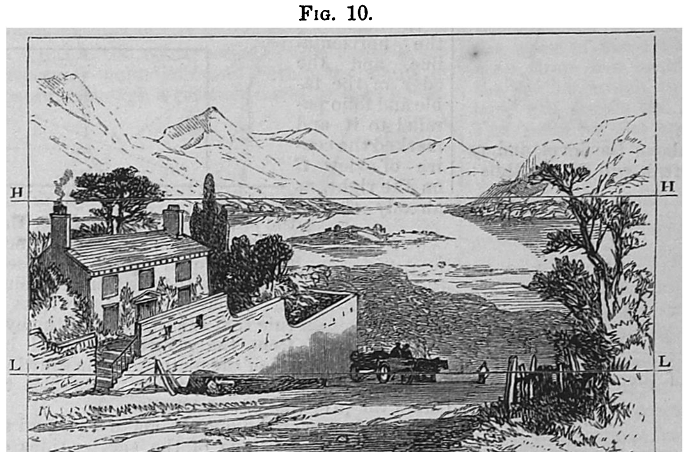
Let the learner place on the table, at a short distance from him, a drawing-board, a portfolio, or any other plane, having the nearer end supported, so as to incline it at any angle at which the plane is yet visible; and let a bystander hold a straight ruler, vertically, at a small distance from the nearer edge, it will then be found that the lower and more remote edge will appear higher on the ruler that the nearer one. Merely, however, to draw two horizontal and parallel lines across the paper and to represent a descending plane by the space between alone, without the assistance of other lines in contrast with them would be impossible; but the plane being visible, the effect of descent can be readily described by the aid of auxiliary lines and a judicious use of light and shade.

FIG. 9.



Again—let the sketcher suppose himself on a hill descending directly from him, and that a yard or two in advance of him a line is drawn across the road parallel to his position, and another a few yards further down parallel to the first; it would be found, that on holding a pencil upright at a little distance so as to cut both lines, and looking at them with one eye closed, the lower line would rise higher on the pencil than the upper and nearer line.

FIG. 10.



In this example the student is supposed to be on such a hill, having his vanishing line *L L*, and his horizontal line *H H*, in their proper positions. Then all lines on the descending plane, or parallel with it, as the timber and the marks of the wagon-wheels, &c., would tend towards the vanishing line *L L*, while the horizontal lines of the house and wall would tend in the direction of the horizontal line, and if produced to that limit, would there be lost. In this example, the lower extremity of the descent is shown to be higher on the plane of the paper than the upper part.

ON THE REPRESENTATION OF HORIZONTAL LINES—WHETHER PARALLEL, PERPENDICULAR, OR OBLIQUE TO THE PLANE OF THE PICTURE.

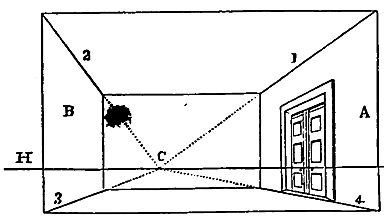
A horizontal right line has, with respect to the

plane of the picture, one of three positions. It is parallel to it, oblique to it, or perpendicular to it. The following supposition will explain what is meant by these three relations of a horizontal line.

Let the student suppose himself sitting with his back against one of the walls of a room. The wall opposite to him is parallel with that behind him, and consequently to the plane of his picture in that position. The two remaining walls being at right angles with that opposite to him, are evidently perpendicular to the plane of the drawing, and all horizontal right lines on those two walls are also perpendicular to it, and will appear to tend towards a point immediately opposite to his eye.

H H is the horizontal line or level of his sight, *C* the point opposite his eye, and that towards which all horizontal right lines on the walls *A* and *B* appear to slant; though in *reality* they are perpendicular to the wall at *C*.

FIG. 11.

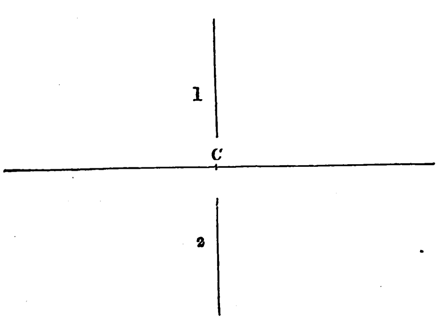


The lines 1 and 2, where the ceiling and walls meet, and 3 and 4, the lower limit of the walls, as well as the horizontal lines of the door and its panels, are, in that position of the spectator, all perpendicular to the plane of the drawing.

It has been observed that right lines, when seen perpendicular to the plane of the picture, never appear in their real position. This is easily shown, if a line be placed *immediately before the sight;* but a little above or below the level of the eye, it will appear as if perpendicular to the ground.

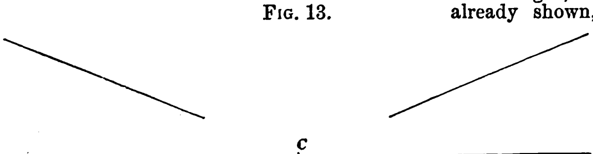
Thus *C* is the point opposite the eye; 1 and 2 represent a line held above the level or below the level of the sight, but immediately opposite

FIG. 12.



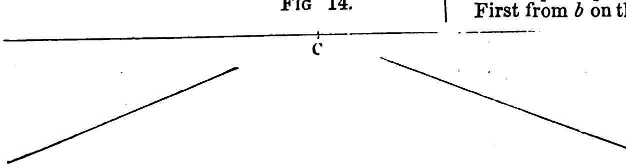
to it. If it be placed above the level, and removed to the right or left, it will appear thus:

FIG. 13.



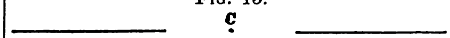
And if below the level of the sight, it will take this direction.

FIG 14.



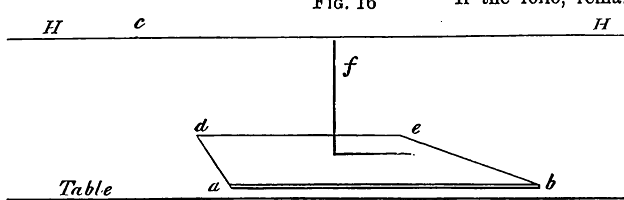
But if on the right or left of the eye and on a *perfect level*, either oblique or perpendicular to the eye or the picture, it will fall into the horizontal line.

FIG. 15.



This is explained more fully by placing on a table, an empty portfolio, into the upper leaf of which is fixed a long pencil stick. Let the lower edge of the folio be even with the edges of the table, as the line *a b* in the diagram.

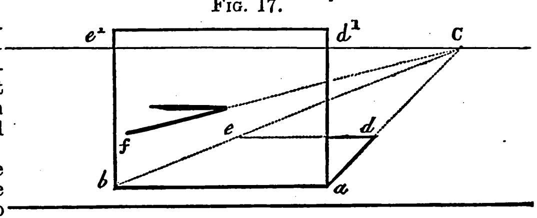
FIG. 16



Let the spectator seat himself a little to the left of the folio, parallel to the edge *a b;* and let *C* on the horizontal line *H H*, represent the point immediately opposite the eye; then the sides *a d* and *b e* of the folio will appear to tend towards the point *C*, the centre of view; the pencil-stick *f* appearing, as it really is, perpendicular to the table.

Now let the upper leaf of the folio be raised until its plane be perpendicular to the plane of the table. The relations of the lines *a d* and *b e* with the horizontal line are now changed, and the stick *f*, still perpendicular to the leaf of the folio, becomes by the change of position *perpendicular to the plane of the picture*, and like all lines similarly disposed, tends towards the centre of view *C*, while the sides *a d*' and *b e*' are become perpendicular to the table, and appear much longer then when seen in the original position.

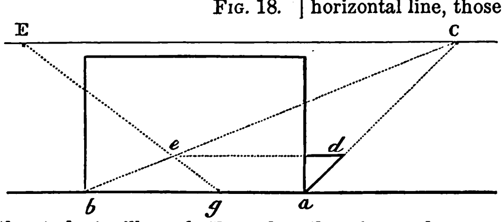
FIG. 17.



This diagram exemplifies the horizontal right line as seen parallel and perpendicular to the plane of the picture; two of the three relations ascribed to it. The parallel lines are *a b* and *d e;* the perpendicular lines are *a d*, *b e*, and the stick *f*.

The apparent increase of dimension of *a d*, when raised from its horizontal position, having been shown, it will be well to exemplify the manner of drawing this side of the folio when lying flat.

FIG. 18.



Having drawn the horizontal line, and the edgr of the table and folio parallel to it, and marked the centre of view *C* on the right, as already shown, the student will mark *E* on the horizontal line, at a distance from *C* equal to the supposed distance of the eye from the point *C*. It has been laid down as a rule that the distance of the eye from the centre *C* should be equal to the width of the picture, but in drawing a *single object*, a shorter distance will suffice to show the principle of construction.

First from *b* on the line *a b*, make *b g* equal to one of the shorter sides of the folio; then draw a fine line from *g* towards *E* to meet the indefinite side *b C* at *e*, and draw *e d* parallel to *b g* meeting the other indefinite side, *a C*, at *d;* then *a*, *d*, *e*, *b* will be the representation of the leaf lying on the table, and *a d*, the *apparent* length of that side of the folio. The student should bear in mind that if the point *E* were transposed to the *other* side the centre *C*, the measure of the shorter side *b g*, instead of being marked towards the right hand from *b*, must be set off from *a*, towards the left hand, and the result will be the same.

OF LINES OBLIQUE TO THE PLANE OF THE PICTURE.

The third relation remains to be explained. If the folio, remaining flat, be moved ever so slightly, but obliquely, from the position in which we have considered it, the lines *a d*, *b e*, and the stick *f* will no longer tend towards the centre of view *C*, but become oblique to the plane of the picture, and having vanishing points in the horizontal line according to their angles of obliquity, as already explained at Fig. 2.

The method of drawing these lines will be understood from the following illustration, which explains the construction of a figure, representing a rectangular block of stone, (Fig. 19), placed under the conditions of the third case.

The base line, the horizontal line, the centre of view, and the place of the eye, are all given as before. Let *a b* be the near vertical edge of the block, similar to that in No. 2 of cut 3, where the vanishing points for the horizontal lines are inaccessible, an inconvenience which may be avoided by proceeding as follows:

Let *C E* be equal to one-third the true height of the point *E* from *C*, and let *L* be equal to one-third the true distance of the vanishing point from *C* on *that* side of the centre; join *E L*, and from *E* draw *E M* perpendicular to *E L*, making the same angle join *E L*, and draw (from *E*) *E M* perpendicular to *E L*, making the same angle at the eye as the sides of the object make with each other, in this case a right angle. *C M* will be equal to one-third of the distance of the true vanishing point on that side of *C*.

As the whole of the object is here below the horizon, draw downwards from *L* and *M* lines parallel to *C E*, as here shown; also produce *E C* to the base line, and bisect the angle *L E M* to *x*. Take *any* small opening of the compass, and mark it off repeatedly from *C* to the base line) remembering that if any part of the object be *above* the horizontal line, those lines at *L* and *M* must be continued upward also), and number those divisions as in the figure. Take in the compass as many of these divisions as make *one less* than the number of times *C E* is contained in the true distance of the eye. In this example it is contained three times, therefore, take *two* divisions from *C E*, and mark them off downwards (and if required upwards also) on the lines at *L* and *M*, and subdivide each of those divisions into *as many parts as C E is contained in the true distance* (3), and number them as in the figure.

Now from any point *a*, a line drawn in the direction of the two corresponding points on the divided lines will tend towards the true but inaccessible vanishing points. Thus a line drawn from *b* in the direction of the two corresponding figures 2 and 2, will tend towards the point required, and a line drawn from the point *a*, passing between 4 and 3, at a properly proportioned distance from each, on the lines through *C* and *L*, will tend towards the same point. If the utmost nicety be required, the several divisions

FIG. 19.

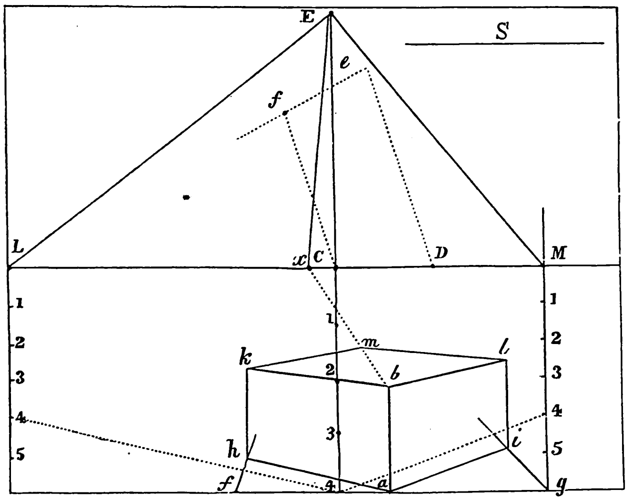
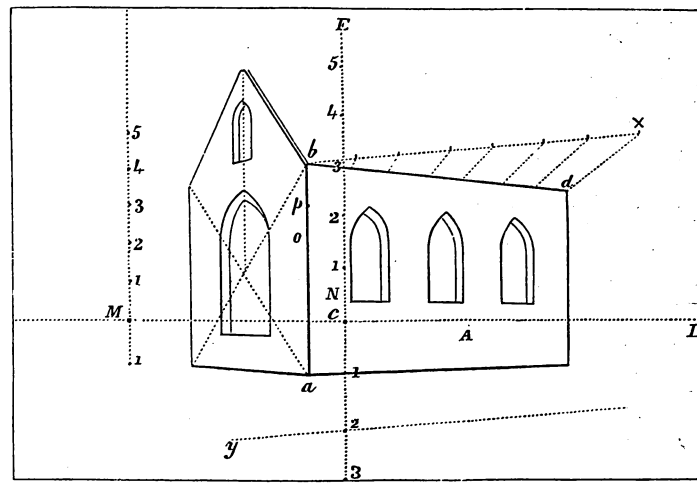


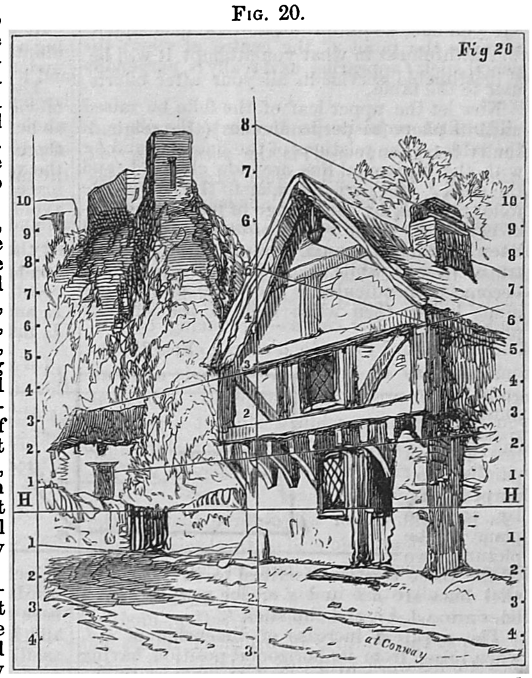
FIG 22.



may be again subdivided. In order to determine the proper length of the line from a, let S be equal to thet rue measure of the side. Make L D on the horizontal line equal to L E and from C and D draw *any* two convenient lines parallel to each other, and make D e equal to S. Then draw e L, cutting $C f$ at f, and make a f and a g on the base line each equal to $C f$.

From f and g draw lines towards C, meeting a h at h, and a i at i; on these points raise perpendiculars to meet the upper edges at k and l. Through l and about midway between numbers 1 and 2, draw l, m, meeting the diagonal b x at m, then join m k, which completes the figure, the whole of the necessary points being within the boundaries of the paper, and thus superseding the difficulty of inaccessible vanishing points. The construction of the figure may seem at first complex, but a little practice will enable the sketcher, in determining his lines, to dispense with points and the ruler altogether, except where occasionally the use of his pencil may be desirable to afford a perfectly straight line.

FIG. 20.



In this example (Fig. 20), the horizontal lines forming the wood work in front of the building, and those of the roof are oblique to the plane of the picture, and have a tendency to points considerably beyond the limits of the paper, but the difficulty is met by the rule already laid down, in reference to cut 19, which is here exemplified in application to a pictorial object.

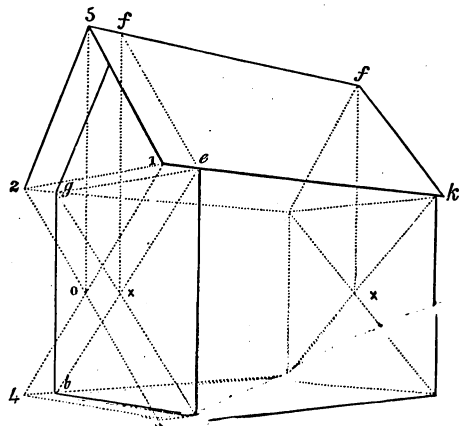
The oblique lines of the gable are represented according to their angle of obliquity, and their position in relation to the plane of the picture; but for general sketching purposes it will be sufficient to draw diagonals as described in Fig. 21.

In the diagram (Fig. 21), or in any sketch to which the rules of its construction apply, the lines of the unseen parts of the structure, which are here dotted, may be lightly put in with a pencil, so that when the visible lines and surfaces are represented, the light lines may be effaced. The diagonals a g, e b, &c., being drawn, perpendiculars are raised on their intersections at x x, that in front being made equal to the assumed height of the gable, as x f (or the height of the apex of the pediment, if there be one), and draw the oblique lines e f, and f g.

If the roof project, as in Fig. 20, produce outwards the horizontal lines of the walls and the edge of the roof to the apparent extent, as at e 1; and draw a line from 1 towards the proper vanishing point, which will give the point 2. Now produce the lower lines a 3, and b 4, making a 3 equal to e 1; then a line from 3 towards the vanishing point will give the point 4 and the junction 1 4, and 2 3 will give diagonals intersecting at o, whence a perpendicular is raised, meeting the line f f produced, at 5, then 1 5 and 2 5 supply the oblique lines of the projecting roof.

Thus in the construction of this figure every necessary point is found within the limits of paper, although a relation could at once be established with the vanishing points, if requisite.

FIG. 21.



The structure represented in Fig. 22, may be drawn according to instruction given in reference to diagram No. 19.

Then, as before, let C E equal one-third of the true distance of the eye, and L and M respectively equal one-third of the distance of the true vanishing points from the centre of view C.

Through the corresponding numbers 3 and 3, or 2 and 2 (see Fig 22), draw a line, tending to the true vanishing point of the horizontal lines of the wall, in which three openings or windows, with their piers, are to be represented according to their proper scale of relation.

This is usually effected by drawing a line from a, or b, parallel to the horizontal line on which the geometrical measures of the piers and windows are marked off from a or b, whichever may be adopted. But in *this* case a confusion of lines would ensue from the adoption of such a course; an inconvenience which may be obviated by drawing from b a line parallel to that running through 2 and 2, and marking the windows and piers upon it in their proportionate geometrical widths from b to x. Then a line drawn from x through the corner of the wall at d, to meet that through 2 2 at y, gives a point (y) towards which lines from all the divisions on b x may be drawn, to divide the upper line of the wall, as seen in the figure; from which divisions, perpendiculars may be dropped, showing the proportionate diminutions of the widths.

Determine the lower lines of the windows, as at n, on the line a b; and let n o be the height of the chord of the arch from the bottom of the windows, and o p the height from the chord to the apex of the arch, and from these points n o p, draw lines towards the vanishing point of the line b d, which, by crossing the perpendiculars, will decide the heights of the windows. The point for the apex of each arch may be found by means of diagonals.

(To be Continued.)

LETTERS ON PORTRAIT PAINTING.

NO. I.

[We have the gratification of presenting to our readers the first of a series of letters upon portrait painting, written for the Bulletin by a distinguished American artist, whose own excellence in this department entitles his opinions to the highest respect. They are in the form of communications from a teacher to his pupil, and will be found of great value not only to the professional reader but to the general student of art.]

I am glad to learn that you have determined to devote your whole attention to art as a pro-